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Medical dissertation

on

Cholera Infantum

By

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Cholera Infantum is a disease almost endemial, to the infants of this country, and from the regularity of its periodical recurrence, during the summer months, has acquired, the common name of "the summers complaint of children".

There is no disease to which infants are subject, that so often calls in requisition, the skill of the American Physician; it has swelled the bills of mortality of our towns, and cities, more than any other disease, that prevails among that part of our population, indeed so great is the mortality, that mothers look forward to the second summer, with instinctive dread, as the most critical period of their offspring's age. —

The bills of mortality for the years 1818 & 1819, in the city of Philadelphia, will show a proportion of nearly one in four, of deaths, among children from Cholera Infantum, and so often does it baffle the best concerted plans of medical treatment that there is too much cause for placing it amongthe opprobia medicorum.

The history of it by foreign writers are but vague and im-

imperfect notices; the profession is much indebted to our distinguished countryman Dr Rush, for his faithful history, and judicious plan of treatment, of this disease; and the late Dr Miller of New York has added an excellent paper on its treatment.

Cholera Infantum usually makes its appearance with us, about the middle of June, or the beginning of July, and generally continues until near the middle of September, or the first of October, and it usually commences sooner or later in the summer, as the hot weather sets in early or late; the frequency and danger of its attacks, are always in proportion to the heat of the weather.

It affects children from the first or second week after their birth, until they are two or three years old, the attacks of the disease are much more rare before the teething begins than after that period; the children born in the summer

are seldom affected before the succeeding summer.-

It sometimes begins with a Diarrhœa, which continues for several days without any other symptom of indisposition, but it more frequently comes on with a violent vomiting, and purging, and a high fever, in the latter form of the disease, if it is not fatal in a few days (which is very frequently the case) it ceases without being followed by a Diarrhœa, and the child is restored to health; the matter discharged from the stomach, and bowels, is generally yellow, or green, but the stools are sometimes slimy, and bloody, without any tincture of bile, in some cases they are nearly as limpid as water; sometimes the vomiting continues without the purging, but more generally the purging continues without the vomiting, when the purging begins, the vomiting appears to be relieved by it; and indeed so great is the improvement, in our patients, at this time, that it would seem as if nature had made an effort to relieve herself; through the whole course of the disease the stools are frequently large and extremely fœtid, but in some instances

they are without smell, and resemble the drink, and aliments, which have been taken into the body; worms are frequently discharged in the stools: The children in this stage of the disease appear to suffer a great deal of pains, they are very restless, and are never easy in one posture; the pulse is quick and weak, the fever is of the remitting kind, and discovers evident exacerbations especially in the evening; but when the disease has continued for many weeks there is often no obvious febrile excitement, the skin being preternaturally cool, and of a livid appearance, on the ankles, and feet; a swelling frequently occurs in the abdomen, and sometimes in the extremities, the eyes appear languid, and hollow, and the childsen generally sleep with them half open.—

The duration of this disease is variable sometimes it proves fatal in a few days, but it often continues for several weeks, with occasional variations in its appearance; where the disease has been of long continuance, the approach of death is gradual, and attended by a number of distressing symptoms, an emaciation of the

body, to such a degree that the bones come through the skin, where it comes in contact with the bed; livid spots, these appear oftener upon the abdomen than elsewhere, and although a very unfavourable symptom, do not always mark a fatal issue, a singultus, convulsions, and a sore mouth, generally precede the fatal termination of this disease; a cool day frequently abates the violence of this disease, and disposes it to a favourable termination.

The predisposing causes of this complaint consist in debility, induced by heat and impure air; the exciting or occasional causes improper diet, clothing, dentition worms &c.

Independent of the causes and external phenomena of this complaint, dissections inform us, of the nature of Cholera Infantum, the brain generally is found in a healthy condition, but in some cases I think effusions take places, nor are the viscera of the Thorax in the least implicated, it is on the contents of the Abdomen that the force of the mal

malady is expended, the effects of inflammation are traced throughout the Alimentary Canal, and more especially on the mucous membrane, in which are dark spots, and more particularly in the Duodenum, and on the Peritoneum these spots also occur, but not so frequently; as might be expected the Hepatic System is very materially deranged, the Liver is generally found increased in size, and altered in condition, being sometimes indurated, but more commonly soft, and flabby, the ducts and gall-bladder are loaded with bile, very much altered from their healthy condition, the Spleen and Pancreas are seldom involved in this corruption. —

From the foregoing history of this disease, its causes, symptoms &c. we can but refer the origin of this disease to the Stomach; the biliary system becomes ultimately diseased by sympathy.

The first indication that calls for our aid, is to evacuate the Stomach, and bowels, which I prefer to do

do by Calomel, or Calomel and Jalap combined; but when the Stomach is very irritable, it is better to omit the latter; the child is generally better the day after taking the medicine and sometimes continues well a week or two, when the disease recurs again and is relieved by the same plan, but if the disease is suffered to continue for some weeks, before we are called in, the child becomes emaciated and worn out, and the favourable opportunity of being benefitted by this valuable medicine is lost; ~~and~~ it is now given with little advantage; in some cases of a mild character the Oleum Ricini, Manna, or Magnesia answer very well; in the more violent cases, accompanied with great irritability of the Stomach, and vomiting, these medicines will not be retained; we must therefore allay irritability by anodyne injections and fomentations to the Stomach, and the warm bath; after the Stomach becomes tranquil, we may then recur, with advantage, to mercurial purges combined with opium; in those cases attended with violent vomiting, thirst, and pain about the Umbical region, when the Stomach will not retain purgative medicines, Dr Chapman's experience authorizes

vomiting, in such cases with Ipecacuanha, it relieves the stomach of its contents, and imparts to it, tone; to prevent the recurrence of the vomiting, but it is more servicable by determining to the surface, and equalizing excitement, for in as much as we determine to the surface we lessen the inflammation in the Alimentary canal; this disease being of inflammatory character requires venesection; but this to be governed by the pulse, and condition of the patient; —— After having tranquilized the Stomach, much may be done by mecurial purges; as soon as the Alimentary canal however is vacuated, of the bilious, and other offensive matter, we should cease with purging; if carried farther, we but weaken our little patient; in this stage of the disease we may use with advantage a combination of Opium, Calomel, and Ipecacuanha; these to be administered in broken doses; the warm bath is one of our most efficacious remedies, producing an equal excitement on the surface; but as the effects of the warm bath are evanescent, we must repeat it twice, or least once a day; we may increase the efficacy of it, by common table salt, pepper, brandy, or bitter herbs, in virtue of the same action, blisters are employed, with ad-

Advantage in all stages of the disease; they should be applied to the Stomach, Abdomen, and Extremities.

After a few days, in some cases, and a week in others, a Diarrhœa occurs which is often accompanied with tormina, and tenesmus, and the Stomach is either so debilitated that the food will not digest, or so irritable that it will not be retained when swallowed; here we should give, the Alkaline or cretaceous preparations combined with opium; but the best of our remedies in this stage of the complaint is anodyne injections; as the diarrhœa advances, it loses its acute and painful symptoms, but nevertheless it is profuse and debilitating; I would here advise a mixture of Rhubarb, Magnesia, Opium and some of the essential oils to render it more agreeable to the Palate, and Stomach, to be used pro re nata; — at this conjuncture of the complaint we may use with advantage some of the mineral, and vegetable astringents, of the former I think the Sulphas Aluminæ et Potassæ decidedly preferable; infusions of Galls, Colombo, or the Tincture of Kino (combined with Opium) from the latter class; Dr Physick I am

am informed has derived great benefit from an infusion of the Hæmatoxylon Campechianum or Logwood; In the declining stages of Cholera Infantum after the symptoms of active inflammation are removed an infusion of the Rubus Trivialis or Dewberry a plant that grows in the woods of our country, has been highly recommended by Professor Chapman; the bark of the root of the Rubus Villosus or Blackberry is said to answer equally well as the former.

But after all our remedies have been used, and the most assiduous attention we are often mortified to find our patients very little or not at all benefited, and we are compelled to send them to a more genial climate; for as long as the patients remain in the Towns and Cities exposed to the remote causes, we can only palliate the symptoms; for relapse upon relapse will take place, untill the child becomes worn out and dies; our only hope is from a removal to the Country, provided that Country be a healthy one, and not subject to bilious inter-

intermitting, and remitting fevers, no advantage is gained by a removal from the towns of our southern states on the sea board after the middle of August, and indeed the neighbourhood of our southern towns is not exempt from Cholera Infantum, so enamoured was Dr. Rush with this practice that he says in his Medical Inquiries and Observations, "It is extremely agreeable to see the little sufferers revive as soon as they escape from the city air, and inspire the pure air of the country". —

It is recorded by him that he never in the whole course of his practice lost but three patients out of many hundred with this disease and two out of the three were sent to a sickly part of the country, in the neighbourhood of Philadelphia, and he mentions one recovery from this practice after convulsions had taken place; when the circumstances of the parents of our patients will not allow us to pursue this plan we must substitute riding in an open carriage or sailing in a boat at least once or twice a day. —

By early attention to young children the fatal effects of this disease might measurably be prevented; they should never be weaned the first year of their birth no food appears to agree so well with the infant as the mothers milk.-

The cold bath should be daily used, it is decidedly a useful tonic to the young system but should the cold bath disagree with the patient the warm bath may be substituted with advantage.

Flannel should be worn next to the skin the virtue of this practice is well attested in bowel complaints of advanced age, I would also advise the lower extremities to be covered with woolen stockings.

Attention should be paid to their diet, the farinaceous articles, as Arrow root, Tapioca, or Crackers ground down to a powder and boiled in milk are the most proper articles of diet for children, they should not be indulged in unripe fruits or any

any fruits to an excess, young children should be early accustomed to the use of animal food, which appears to confirm the powers of the Digestive system.

During dentition the gums should always be divided as soon as they are in that state which occasions uneasiness to the child, the Diarrhoea often commences when the irritation of cutting a tooth is great and ceases upon the division of the gum by the lancet, or by the tooth, returning again in three or four weeks when the same causes produces a renewal of the irritation; I cannot concur in the popular prejudice against this pratice for I believe the Absorbents remove the cicatrix with as much facility as the original organized matter.

Before concluding my prophylatick plan, I must state the only preventive that merits our attention and confidence is a removal to a healthy situation in the country before the approach of warm weather. —